

Initial assembled sequence
[Strand]

```
1   AGAAAATACC CACTTTCTCA GGATGATATC AATGGAATCC AGTCCATCTA TGGAGGTCTG
61  CCTAAGGAAC CTGCTAAGCC AAAGGAACCC ACTATACCCC ATGCCTGTGA CCCTGACTTG
121 ACTTTTGACG CTATCACAAC TTTCCGCAGA GAAGTAATGT TCTTTAAAGG CAGGCACCTA
181 TGGAGGATCT ATTATGATAT CACGGATGTT GAGTTTGAAT TAATTGCTTC ATTCTGGCCA
241 TCTCTGCCAG CTGATCTGCA AGCTGCATAC GAGAACCCCA GAGATAAGAT TCTGGTTTTT
301 AAAGATGAAA ACTTCTGGAT GATCAGAGGA TATGCTGTCT TGCCAGATTA TCCCAAATCC
361 ATCCATACAT TAGGTTTTCC AGGACGTGTG AAGAAAATAG ATGCAGCCGT CTGTGATAAG
421 ACCACAAGAA AAACCTACTT CTTTGTGGGC ATTTGGTGCT GGAGGTTTGA TGAAATGACC
481 CAAACCATGG ACAAAGGGTT CCCGCAGAGA GTGGTAAAAC ACTTTCCTGG AATCAGTATC
541 CGTGTTGATG CTGCTTTCCA GTACAAAGGA TTCTTCTTTT TCAGCCGTGG ATCAACGCAA
601 TTTGAATACG ACATTAAGAC AAAGAATATT ACCCGAATCA TGAGAACTAA TACTTGGTTT
661 CAATGCAAAG AACCAAAGAA CTCCTCATTT GGTTTTGATA TCAACAAGGA AAAAGCACAT
721 TCAGGAGGCA TAAAGATATT GTATCATAAG AGTTTAAGCT TGTTTATTTT TGGTATTGTT
781 CATTTGCTGA AAAACACTTC TATTTATCAA TAAATTCATA GACCTAAAAT AAA
```

Figure 1

gaaagagagg a	atg	aag	cgc	ctt	ctg	ctt	ctg	ttt	ttg	ttc	ttt	ata	aca	50
	<u>Met</u>	<u>Lys</u>	<u>Arg</u>	<u>Leu</u>	<u>Leu</u>	<u>Leu</u>	<u>Leu</u>	<u>Phe</u>	<u>Leu</u>	<u>Phe</u>	<u>Phe</u>	<u>Ile</u>	<u>Thr</u>	
	1				5					10				
ttt tct tct	gca	ttt	ccc	tta	gtc	cgg	atg	atg	gaa	aat	gaa	gaa	aat	98
<u>Phe</u> <u>Ser</u> <u>Ser</u>	Ala	Phe	Pro	Leu	Val	Arg	Met	Met	Glu	Asn	Glu	Glu	Asn	
15				20					25					
gtg caa ctg	gct	cag	gca	tat	ctc	aac	cag	ttc	tac	tct	ctt	gaa	ata	146
Val Gln Leu	Ala	Gln	Ala	Tyr	Leu	Asn	Gln	Phe	Tyr	Ser	Leu	Glu	Ile	
30			35				40					45		
gaa ggg aat	cat	ctt	gtt	caa	agc	aag	aat	agg	agt	ctc	ata	gat	gac	194
Glu Gly Asn	His	Leu	Val	Gln	Ser	Lys	Asn	Arg	Ser	Leu	Ile	Asp	Asp	
	50					55						60		
aaa att cgg	gaa	atg	caa	gca	ttt	ttt	gga	ttg	aca	gtg	act	gga	aga	242
Lys Ile Arg	Glu	Met	Gln	Ala	Phe	Phe	Gly	Leu	Thr	Val	Thr	Gly	Arg	
	65					70					75			
ctg gac tca	aac	acc	ctt	gag	atc	atg	aag	aca	ccc	agg	tgt	ggg	gtg	290
Leu Asp Ser	Asn	Thr	Leu	Glu	Ile	Met	Lys	Thr	<u>Pro</u>	<u>Arg</u>	<u>Cys</u>	<u>Gly</u>	<u>Val</u>	
	80			85					90					
cct gat gtg	ggc	cag	tat	ggc	tac	acc	ctc	cct	ggg	tgg	aga	aaa	tac	338
<u>Pro</u> <u>Asp</u>	Val	Gly	Gln	Tyr	Gly	Tyr	Thr	Leu	Pro	Gly	Trp	Arg	Lys	
95				100					105					
aac ctc acc	tac	aga	ata	ata	aac	tat	act	ccg	gat	atg	gca	cga	gct	386
Asn Leu Thr	Tyr	Arg	Ile	Ile	Asn	Tyr	Thr	Pro	Asp	Met	Ala	Arg	Ala	
110			115					120					125	
gct gtg gat	gag	gct	atc	caa	gaa	ggc	tta	gaa	gtg	tgg	agc	aaa	gtc	434
Ala Val Asp	Glu	Ala	Ile	Gln	Glu	Gly	Leu	Glu	Val	Trp	Ser	Lys	Val	
	130					135						140		
act cca cta	aaa	ttc	acc	aag	att	tca	aag	ggg	att	gca	gac	atc	atg	482
Thr Pro Leu	Lys	Phe	Thr	Lys	Ile	Ser	Lys	Gly	Ile	Ala	Asp	Ile	Met	
	145				150						155			
att gcc ttt	agg	act	cga	gtc	cat	ggc	cgg	tgt	cct	cgc	tat	ttt	gat	530
Ile Ala Phe	Arg	Thr	Arg	Val	His	Gly	Arg	Cys	Pro	Arg	Tyr	Phe	Asp	
	160			165					170					
ggc ccc ttg	gga	gtt	ctt	ggc	cat	gcc	ttt	cct	cct	ggc	ccg	ggc	ctg	578
Gly Pro Leu	Gly	Val	Leu	Gly	His	Ala	Phe	Pro	Pro	Gly	Pro	Gly	Leu	
175				180					185					
ggc ggt gac	act	cat	ttt	gat	gag	gat	gaa	aac	tgg	acc	aag	gat	gga	626
Gly Gly Asp	Thr	His	Phe	Asp	Glu	Asp	Glu	Asn	Trp	Thr	Lys	Asp	Gly	
190			195				200					205		
gca gga ttc	aac	ttg	ttt	ctt	gtg	gct	gct	cat	gaa	ttt	ggc	cat	gca	674
Ala Gly Phe	Asn	Leu	Phe	Leu	Val	Ala	Ala	His	Glu	Phe	Gly	His	Ala	
	210					215					220			

Figure 2A

ctg ggg ctc tct cac tcc aat gat caa aca gcc ttg atg ttc cca aat	722
Leu Gly Leu Ser His Ser Asn Asp Gln Thr Ala Leu Met Phe Pro Asn	
225 230 235	
tat gtc tcc ctg gat ccc aga aaa tac cca ctt tct cag gat gat atc	770
Tyr Val Ser Leu Asp Pro Arg Lys Tyr Pro Leu Ser Gln Asp Asp Ile	
240 245 250	
aat gga atc cag tcc atc tat gga ggt ctg cct aag gaa cct gct aag	818
Asn Gly Ile Gln Ser Ile Tyr Gly Gly Leu Pro Lys Glu Pro Ala Lys	
255 260 265	
cca aag gaa ccc act ata ccc cat gcc tgt gac cct gac ttg act ttt	866
Pro Lys Glu Pro Thr Ile Pro His Ala Cys Asp Pro Asp Leu Thr Phe	
270 275 280 285	
gac gct atc aca act ttc cgc aga gaa gta atg ttc ttt aaa ggc agg	914
Asp Ala Ile Thr Thr Phe Arg Arg Glu Val Met Phe Phe Lys Gly Arg	
290 295 300	
cac cta tgg agg atc tat tat gat atc acg gat gtt gag ttt gaa tta	962
His Leu Trp Arg Ile Tyr Tyr Asp Ile Thr Asp Val Glu Phe Glu Leu	
305 310 315	
att gct tca ttc tgg cca tct ctg cca gct gat ctg caa gct gca tac	1010
Ile Ala Ser Phe Trp Pro Ser Leu Pro Ala Asp Leu Gln Ala Ala Tyr	
320 325 330	
gag aac ccc aga gat aag att ctg gtt ttt aaa gat gaa aac ttc tgg	1058
Glu Asn Pro Arg Asp Lys Ile Leu Val Phe Lys Asp Glu Asn Phe Trp	
335 340 345	
atg atc aga gga tat gct gtc ttg cca gat tat ccc aaa tcc atc cat	1106
Met Ile Arg Gly Tyr Ala Val Leu Pro Asp Tyr Pro Lys Ser Ile His	
350 355 360 365	
aca tta ggt ttt cca gga cgt gtg aag aaa ata gat gca gcc gtc tgt	1154
Thr Leu Gly Phe Pro Gly Arg Val Lys Lys Ile Asp Ala Ala Val Cys	
370 375 380	
gat aag acc aca aga aaa acc tac ttc ttt gtg ggc att tgg tgc tgg	1202
Asp Lys Thr Thr Arg Lys Thr Tyr Phe Phe Val Gly Ile Trp Cys Trp	
385 390 395	
agg ttt gat gaa atg acc caa acc atg gac aaa ggg ttc ccg cag aga	1250
Arg Phe Asp Glu Met Thr Gln Thr Met Asp Lys Gly Phe Pro Gln Arg	
400 405 410	
gtg gta aaa cac ttt cct gga atc agt atc cgt gtt gat gct gct ttc	1298
Val Val Lys His Phe Pro Gly Ile Ser Ile Arg Val Asp Ala Ala Phe	
415 420 425	
cag tac aaa gga ttc ttc ttt ttc agc cgt gga tca acg caa ttt gaa	1346
Gln Tyr Lys Gly Phe Phe Phe Phe Ser Arg Gly Ser Thr Gln Phe Glu	
430 435 440 445	

Figure 2B

tac gac att aag aca aag aat att acc cga atc atg aga act aat act	1394
Tyr Asp Ile Lys Thr Lys Asn Ile Thr Arg Ile Met Arg Thr Asn Thr	
450 455 460	
tgg ttt caa tgc aaa gaa cca aag aac tcc tca ttt ggt ttt gat atc	1442
Trp Phe Gln Cys Lys Glu Pro Lys Asn Ser Ser Phe Gly Phe Asp Ile	
465 470 475	
aac aag gaa aaa gca cat tca gga ggc ata aag ata ttg tat cat aag	1490
Asn Lys Glu Lys Ala His Ser Gly Gly Ile Lys Ile Leu Tyr His Lys	
480 485 490	
agt tta agc ttg ttt att ttt ggt att gtt cat ttg ctg aaa aac act	1538
Ser Leu Ser Leu Phe Ile Phe Gly Ile Val His Leu Leu Lys Asn Thr	
495 500 505	
tct att tat caa taaattcata gacctaaaat aaacctcaac aggtctttta	1590
Ser Ile Tyr Gln	
510	
atataaatc tgcttcaaaa tagaataaaa ccattcttta acaacaagtt gctggtccta	1650
gttctaaata tccaaattca atggccattt tgagctgcct gattctttta ataggaagtt	1710
attatgtaga aacaaaaatc tctgactgta cttaagcct atttcatgct ttgtggactt	1770
ggagaagaca tgtcttataa ctgaatactg aaacatttat <u>taa</u> ccaatc ttagcattc	1830
tg	1832

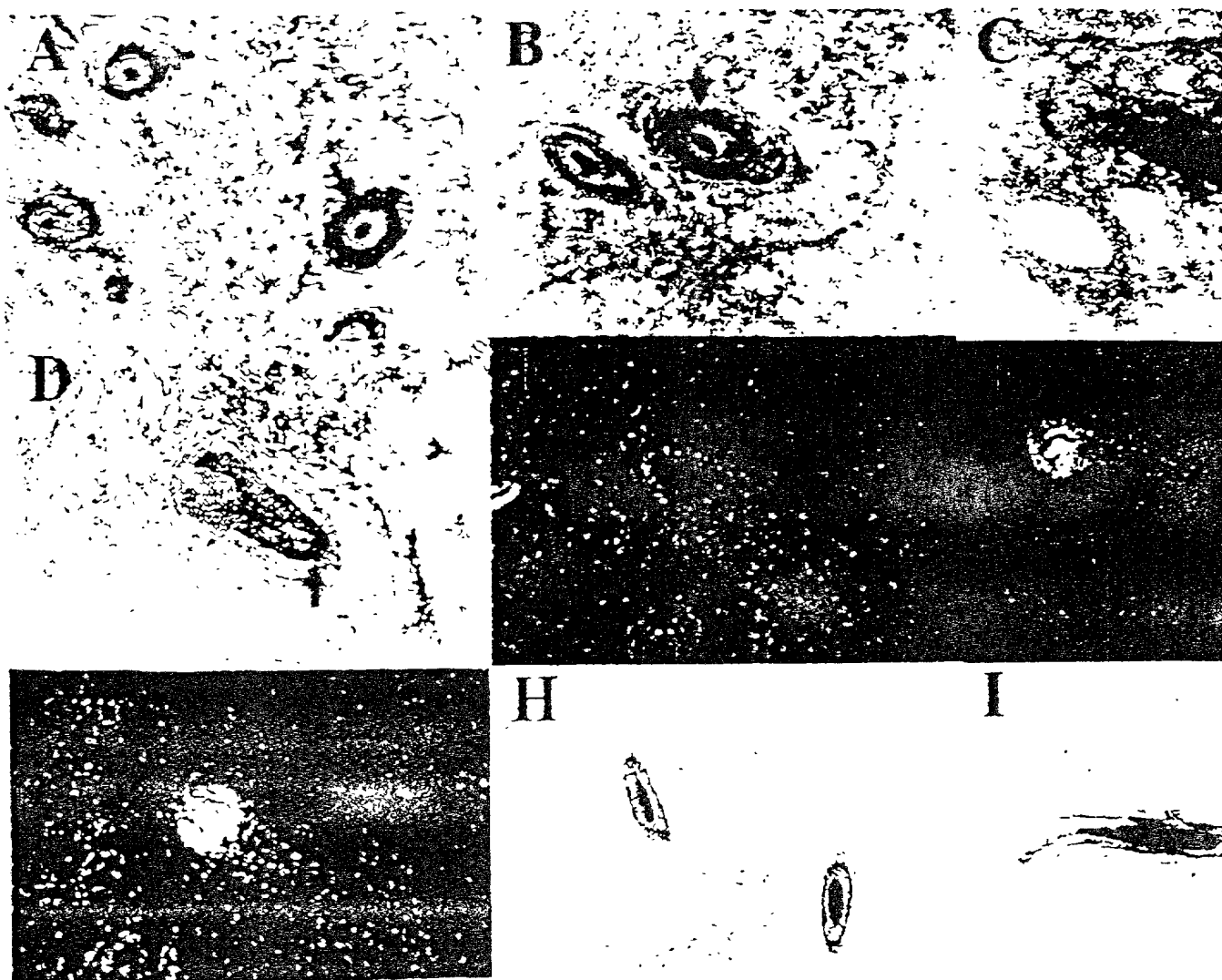
Figure 2C

Figure 3

[illegible]

100

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	



A-G: Antisense RNA probe for human MMP 25

H and I: Sense RNA probe for human MMP 25

Arrows in A, B, C, and D highlight cells in the hair follicle that express MMP25 message

Cell nuclei are counterstained with H33258 in E, F, and G.

Figure 5